



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Allan M. Miller et al.                      Art Unit : 1643  
Serial No. : 09/407,605                                      Examiner : Chih Min Kam  
Filed : September 28, 1999  
Title : OPTIMIZED MESSENGER RNA

Commissioner for Patents  
Washington, D.C. 20231

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AMENDMENT AND RESPONSE

TECH CENTER 1600/2000

In response to the action mailed August 16, 2002, please amend the application as follows:

In the specification:

On page 24, at line 12, please add the following paragraph.

-- *Figure 14A-B* is Table 1: Codon Frequency In Highly Expressed Human Genes. --

In the claims:

Amend claims 64, 69, 73, 81, 85, 89, 97, 100, 103, 113, 114, 116, 119, 120, 125, 130 and 135 as follows:

64. (Amended) A synthetic nucleic acid sequence which encodes a human protein wherein at least one non-common codon or less-common codon has been replaced by a common codon encoding the same amino acid residue as the non-common or less-common codon, and the synthetic nucleic acid sequence comprises a continuous stretch of at least 150 codons all of which are common codons, wherein by a common codon is meant the most common codon encoding each particular amino acid residue in highly expressed human genes as shown in Figure 14A-B.

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